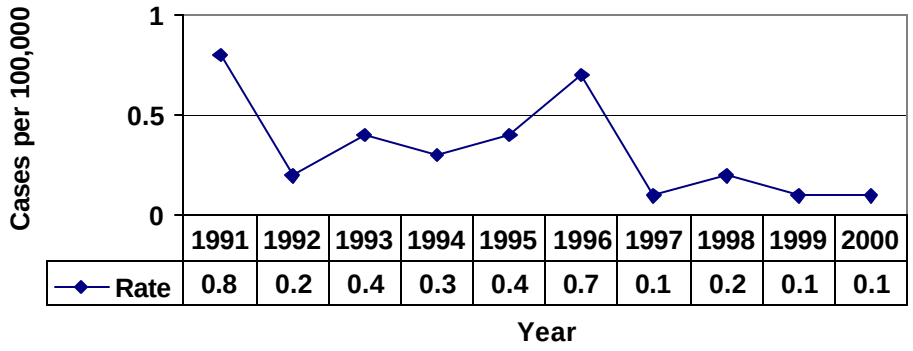
# ROCKY MOUNTAIN SPOTTED FEVER

Rocky Mountain spotted fever is a rickettsial disease caused by *Rickettsia rickettsii.* The disease is characterized by fever, headache, and myalgia, followed in three to five days by a maculopapular rash on the extremities that includes the soles of the feet and palms of the hands. The rash spreads to the rest of the body. Humans contract the disease most commonly from the bite of an infected tick or by contamination of the skin with tissue or feces from an infected tick. The tick must be attached for feeding for 4-6 hours. In Kentucky the American Dog Tick, *Dermacentor variabilis,* is the most common vector.

**Laboratory Criteria for Confirmation:**

- Isolation of *R. rickettsii* from a clinical specimen (rarely performed), **OR**
- Demonstration of positive immunofluorescence in tissue biopsy, **OR**
- Fourfold or greater change in antibody titer to *R. rickettsii* antigen by immunofluorescent antibody (IFA), compliment fixation (CF), latex agglutination (LA), microagglutination (MA), or indirect hemagglutination (IHA) test in acute and convalescent specimens ideally taken three weeks or more apart, **OR**
- Positive polymerase chain reaction (PCR) assay to *R. rickettsii.*

**Rocky Mountain Spotted Fever Incidence**
**Kentucky, 1991-2000**



| **Incidence in Kentucky** | **2000** |
|---|---|
| **Number of Cases** | 4 |
| Rate per 100,000 | 0.1 |
| **Rate by Gender** | |
| Female | 0.1 |
| Male | 0.05 |

**2000**

One case was an 8 year old child, one case was a 37 year old and the other two cases were in persons 54 and 56 years old. They occurred in four different counties in different areas of the state.

In 2000 only four case reports met case definition with proper laboratory confirmation, and 11 case reports were considered probable. The lack of a convalescent titer is the primary reason more cases are not confirmed.